

Wellness Notes

Resistance Training for Older Adults

Resistance training provides many functional benefits for older adults, yet only 12% of adults ages 65 to 74 years strength train, according to the Centers for Disease Control. Two studies indicate that shorter bouts of resistance training are effective to improve muscles and to encourage participation.

At the University of Queensland, investigators compared single-set versus multi-set protocols in 28 men and women ages 65 to 78. Participants performed 8 repetitions of 7 exercises for major upper and lower body muscle groups using exercise machines twice a week for 20 weeks. They were divided into a one-set group and a 3-set group.

Both groups increased isotonic muscle strength, improved in the chair rise, backwards walk, 400 meter walk and stair climbing. The 3-set group showed greater gains in isotonic muscle strength for some exercises, and in muscle endurance. The team concluded that "resistance training consisting of only single-set exercises is sufficient to significantly enhance muscle function and physical performance, although muscle strength and endurance gains are greater with higher-volume work."

The second study at McMaster University examined motivation to strength train in a group of 59 sedentary adults (80% women), mean age 76.1 years. Participants attended one strength training session at a seniors center and then reported on perceived exertion and self-efficacy. The perception of low exertion was most important to motivate continued strength training. Researchers concluded that "sedentary older adults can be motivated toward joining a strength training program after an initial strength training session that required low exertion."

SOURCE: Journal of the American Geriatrics Society, 53:2090 (December 2005) and American Journal of Health Promotion, 20(2) (November/December 2005)